



## SEVERE ACUTE RESPIRATORY SYNDROME

### Interim Recommendations for Cleaning and Disinfection of the SARS Patient Environment

Cleaning and disinfection of environmental surfaces are important components of routine infection control in healthcare facilities. Although environmental surfaces (e.g., floors, table tops) are generally not involved in transmission of microorganisms, some surfaces, especially those that are touched frequently (e.g., bed rails, door knobs, lavatory surfaces) may serve as important reservoirs of microbial contamination. When these surfaces are touched the microbial agents can be transferred to nose, mouth, eyes, or other environmental surfaces. The performance of hand hygiene ([www.cdc.gov/handhygiene](http://www.cdc.gov/handhygiene)) and adhering to a regular schedule of cleaning and disinfection will help reduce the microbial burden in the patient's environment. This may be an important adjunct measure for controlling the spread of SARS in healthcare settings. Personnel who are assigned this responsibility should be trained and supervised in cleaning and disinfection methods. In areas with a high volume of SARS patients, consideration may be given to designating specific personnel for this task.

The approach to environmental cleaning and disinfection for SARS will follow the same principles used for controlling the spread of other infections in healthcare settings.

#### Personal Protective Equipment

Personnel involved in cleaning and disinfection activities should wear appropriate personal protective equipment. Wear full protective attire as required for contact and airborne precautions (disposable gown, utility gloves, and N95 respirator) plus eye protection (goggles or face shield) (see Interim Domestic Guidance on the Use of Respirators to Prevent Transmission of SARS [[www.cdc.gov/ncidod/sars/respirators.htm](http://www.cdc.gov/ncidod/sars/respirators.htm)]) as long as the patient is in the room. Once the patient has been transferred or discharged, wear gown and gloves for post-discharge cleaning.

Postpone initiation of cleaning to allow time for the ventilation system to remove any residual airborne viral particles. In most general patient care areas in U.S. healthcare facilities, the heating, ventilation and air-conditioning (HVAC) systems are generally engineered to provide approximately 6 air changes per hour (ACH). (See table of time required for particulate removal relative to ACH in a room in Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 1994 [[www.cdc.gov/mmwr/preview/mmwrhtml/00035909.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/00035909.htm)].)

#### Type of Cleaning and Disinfectant Agents

Any EPA-registered\* hospital detergent-disinfectant currently used by healthcare facilities for environmental sanitation may be used. Manufacturer's recommendations for use-dilution (i.e., concentration), contact time and care in handling should be followed.

#### Cleaning methods

In-patient rooms housing SARS patients should be cleaned and disinfected daily and at the time of patient transfer or discharge.

- Daily cleaning and disinfection should include horizontal surfaces (e.g., over-bed table, night stand) surfaces that are frequently touched by patients and healthcare personnel (e.g., bed rails, phone) and lavatory facilities. To facilitate daily cleaning, the area around the patient should be kept free

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of unnecessary equipment and supplies.

- Terminal cleaning and disinfection following transfer or discharge should include the type of surfaces described above plus obviously soiled vertical surfaces, frequently touched surfaces (e.g., light cords and switches, door knobs), and durable patient equipment (e.g., bed, night stand, over-bed table, wheelchair, commode). Curtain dividers also should be changed and laundered as appropriate for the curtain fabric. There is no need to routinely clean and disinfect walls, window drapes, and other vertical surfaces unless visibly soiled; disinfectant fogging for purposes of air disinfection is not recommended.
- Patient care equipment such as mechanical ventilators, pulse oximeters, blood pressure cuff, should be cleaned and disinfected in accordance with current CDC recommendations, manufacturer's instructions and facility procedures for critical, semi-critical and non-critical surfaces. See [www.cdc.gov/ncidod/hip/isolat/isolat.htm](http://www.cdc.gov/ncidod/hip/isolat/isolat.htm) and [www.cdc.gov/ncidod/hip/sterile/sterile.htm](http://www.cdc.gov/ncidod/hip/sterile/sterile.htm).

Cubicles or rooms in out-patient areas where patients with suspected SARS are evaluated should be cleaned and disinfected before another patient is seen or cared for in that environment. Areas that should be specifically targeted for cleaning include the examination table and horizontal surfaces that may have been touched by the patient or healthcare provider.

Solutions used for cleaning and disinfection should be discarded after use. Thoroughly rinse and clean housekeeping equipment after use in a SARS room or area and allow the equipment to dry. Launder reusable mop heads and cleaning cloths according to current practice.

*\* There are no disinfectant products currently registered by the U.S. Environmental Protection Agency (EPA) specifically for the inactivation of the newly identified viruses associated with SARS. However, related viruses with physical and biochemical properties similar to the possible SARS agents are known to be readily inactivated by EPA-registered chemical germicides that provide low- or intermediate-level disinfection during general use.*

For more information, visit [www.cdc.gov/ncidod/sars](http://www.cdc.gov/ncidod/sars) or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)

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